EDUCATIONAL GAMES

PRIORITY

This application claims priority to U.S. provisional application entitled "A Mathematical Game," Application No. 60/541,475, filed February 2, 2004, U.S. provisional application entitled "A Chemistry/Physics Game," Application No. 60/541,424, filed February 2, 2004, and U.S. non-provisional application, 10/793,235, filed March 4, 2004, the contents of all of which are incorporated by reference in their entireties.

FIELD OF THE INVENTION

This application relates to the field of games, in particular, education games, such as a mathematical game, a science game including a chemistry game, a physics game, and a language game.

BACKGROUND OF THE INVENTION

People, in particular, children and teenagers, can learn in the context of game playing. Games are typically more fun than studying. Thus, if educational materials can be put in the context of games, and the games can be played over and over again, it will create a fun environment for learning. In particular, if games are played between adults and children, the exercise will promote more interaction between them.

Further, strategy and problem-solving are important skills to acquire for work purposes. These skills can also be learned in the context of games. Additionally, games can be designed to be played in teams, thus fostering cooperation between players.

Moreover, games can be tailored or adapted to make them age-appropriate so that people of all ages can play including pre-schoolers, kindergarteners, children in elementary schools, middle schools, junior high schools, high schools, college as well as adults.

Thus, it will be very desirable to design one or more educational games, such as a mathematical game, a chemistry game, a physics game, a biology game, a language game and the like that can help people learn outside of a school setting, to help them improve or acquire skills and knowledge, for example, in the fields of mathematics and science.

SUMMARY OF THE INVENTION

It is, therefore, one of the objects of the present invention to provide one or more games that are educational.

It is another one of the objects of the present invention to provide a game as above that can be played by many people of all ages, or that can be tailored to make them age appropriate.

It is another one of the objects of the present invention to provide a method for playing the foregoing games.

It is another one of the objects of the present invention to provide for a method of playing the game electronically, such as by accessing the game on the Internet, in a hand-held device or on a computer disk.

In accordance to one of the objects of the invention, there is provided one or more educational games including, for example, a mathematics ("math") game, a chemistry game, a physics game, and/or a language game. The invention provides one or more of these games in a game set.

In accordance to one of the objects of the invention, there is provided a game set, where the game set contains a plurality of sets of tiles. In one embodiment of the invention, there is provided a first set of tiles where each tile contains a number, one or more letters of an alphabet, and a second set of tiles where each tile contains a symbol, such as a symbol that is useful in a mathematical equation.

In accordance to another one of the objects, there is provided a language game set, where the game set contains a plurality of sets of words. In one embodiment, there is provided a first set of words that are nouns. Optionally, there is provided a second set of words that are pronouns. Again optionally, there is provided a third set of words that are verbs. Yet optionally, there is provided a fourth set of words that are adjectives. Still optionally, there is provided a fifth set of words that are adverbs. Further optionally, there is provided a sixth set of words that are prepositions. Yet further optionally, there is provided a seventh set of words that are conjunctions.

In accordance to still another one of the objects, there is provided a game set as above, where the number is chosen from among: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10. Optionally, the number can be any number chosen from between 0 and 100, or 0 and 1000, or 0 and 10,000.

In accordance to yet another one of the objects, there is provided a game set as above, where the number is a fraction. For example, the fraction is chosen from among: ½, ⅓, ⅔, ¼, ¾, 1/5, ⅛, ⅜, ⅝, ⅞, and 1/10.

In accordance to still another one of the objects, there is provided a game set as above, where the number is a decimal such as, for example, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8 or 0.9. Optionally, a decimal number contains more than one decimal places, such as, two or three places, for example, 0.15, 0.25, 0.35, 0.45, 0.55, 0.65, 0.75, 0.85, 0.95 or 0.33, or 0.125, 0.0.375, 0.625, 0.875 and the like.

In accordance to another one of the objects, there is provided a game set as above, where the letter of the alphabet is in capital letter or in non-capital letter, i.e., small case letter.

In accordance to a further one of the objects, there is provided a game set as above, where the letter is a letter of an English alphabet or a non-English alphabet.

In accordance to a further one of the objects, there is provided a game set as above, further optionally providing an eighth set of tiles, each containing a symbolic representation of an element of the Periodic Table, such as C for carbon, N for nitrogen, O for oxygen and the like.

In accordance to yet another one of the objects, there is provided a game set as above, still optionally providing a ninth set of tiles, each containing an organic or inorganic group such as SO_4, CO_3, CH_3, or $COOH$, for example.

In accordance to another one of the objects of the invention, there is provided a game as above, where the symbol is a mathematical symbol, where the mathematical symbol (or "math symbol") is useful in a mathematical equation. In one embodiment, the mathematical symbol is chosen from among: a plus ("+") sign, a minus ("– ") sign, a division symbol ("÷"), a multiplication symbol which can be represented by an x ("x") or an asterisk ("*"), an equal sign ("="), an open parenthesis ("("), a close parenthesis (")"), a first open bracket ("["), a first close bracket ("]"), a second open bracket ("{"), a second close bracket ("}"), a greater than symbol (">"), a smaller than symbol ("<"), a percentage symbol ("%"), a square root symbol ("√"), a cube root symbol ("³√"), a dollar sign ("$"), a pound sign ("£"), a Euro sign ("€"), a Yen sign ("¥"),a cent sign ("¢"), an integration ("∫") sign, a degree ("°") sign, a plus and minus ("±") sign, a slash ("/"), a pi ("π") sign, a delta ("δ") sign and a logarithmic sign ("log").

In accordance to another one of the objects, there is provided a game set as above, where the game set includes instructions for playing the game. For example, the instructions will include rules for playing the game.

In accordance to a further one of the objects, there is provided a game set as above, optionally containing a third set of tiles, where each tile in the third set contains a wild number, that is, the tile can represent any number.

In accordance to yet another one of the objects, there is provided a game set as above, optionally containing a fourth set of tiles, where each tile in the fourth set contains a wild symbol, that is, the tile can represent any symbol, such as a symbol that is useful in a mathematical equation such as a function, operator or a notation that is useful in setting up a mathematical equation, including brackets.

In accordance to still another one of the objects, there is provided a game set as above, optionally containing a fifth set of tiles, wherein each tile in the fifth set contains a number in superscript. The number in superscript can be any number such as, for example, 1, 2, 3, 4, 5 or greater, such as 10.

In accordance to still another one of the objects, there is provided a game set as above, further optionally providing a sixth set of tiles, each containing a number in subscript.

In accordance to a further one of the objects of the invention, there is optionally provided a seventh set of tiles, where each tile is blank. Such a tile can be used either as a number, or a letter of an alphabet, or a symbol.

In accordance to a further one of the objects, there is provided a game set as above, further optionally providing a ninth set of tiles, each containing a wild letter. A wild letter is a symbolic representation of a tile that can be used as any letter.

In accordance to yet another one of the objects, there is provided a game set as above, further optionally providing tiles where each tile is decorated. Such decoration can be decorations that appeal to children, teenagers or adults including, for example, dots, one or more fruits, vegetables, flowers, airplanes, cars, balloons, hearts, butterflies, animals, creatures of the sea, such as star fish and the like as well as decorations suitable for different themes such as a 3-leaf clover celebration of the feast of St. Patrick, a turkey for celebration of Thanksgiving, a pumpkin for celebration of Halloween, Santa Claus or Christmas tree for celebration of Christmas, and a menorah for celebration of Hanukah. The decorations can be in one or more colors.

In accordance to another one of the objects, there is a game set as above, further optionally providing numbers and/or letters in Braille.

In accordance to a further one of the objects, there is provided a game set as above, further optionally providing a container for holding the game set, as in a box.

In accordance to yet another one of the objects, there is provided a game set as above, further optionally providing a board, at least one dice, a set of cards, a timing piece, such as an hour-glass timer for 30 seconds or 1 minute or longer, and/or one or more moving pieces. The moving pieces are to be used in conjunction with a board, for example, as in a board game, with each player controlling his or her moving piece to move around the board.

In accordance to another one of the objects, there is provided a method for playing a mathematical game, a chemistry game, a physics game, and/or a language game where the method includes providing a game set as above and allowing the game to be played.

In accordance to yet another one of the objects, there is provided a method of playing a math game, where a player is provided with a game set as above, and the player is allowed to build or balance mathematical equations, such as, for example, $4 \times 5 = 20$.

In accordance to another one of the objects, there is provided a method of playing a chemistry game, where a player is provided with a game set as above, and the player is allowed to build or balance chemical equations, such as, for example, $4 H_2 + 2 O_2 = 4 H_2O$.

In accordance to yet another one of the objects, there is provided a method of playing a physics game, where a player is provided with a game set as above, and the player is allowed to build or balance a physics equation, such as, for example, d (distance) = s (speed) x t (time).

In accordance to still another one of the objects, there is provided a method of playing a language game, where a player is provided with a game set as above, and the player is allowed to build one or more sentences, such as by selection of the appropriate combination of noun, pronoun, verb, adjectives, adverbs, prepositions and conjunctions, for example.

In accordance to yet another one of the objects, there is provided a software program, where the program is configured to allow the game as above to be played electronically, for example, through use of a computer, a disk, a CD, through Internet access or through a hand held or portable device such as a Palm Pilot, a cell phone, a Blueberry, a Treo and the like.

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In accordance to a further object of the invention, there is provided a method of making a game set as above, comprising the steps of providing a mould for making a plurality of tiles and pouring a tile-making material into the mould. The tile-making material will be allowed to set to produce the tiles. The tile-making materials will be any suitable material for making the tiles, including, for example, glass, metal, alloy, ceramic, clay, plastic and other synthetic materials.

In accordance to another one of the objects, there is provided a method of making a game set as above, comprising creating a plurality of tiles out of tile-making materials, and printing or carving a number, a letter, or a symbol on each tile, where the tile-making material includes, for example, natural wood, engineered wood such as laminated wood or pressed wood, cardboard paper, shells, and bones.

In accordance to a further one of the objects, the method as above may optionally include assembling the tiles into a container, such as a box, including a cardboard box, a wooden box, a metal box, a box made of synthetic material, a leather box or any combination of such, or the container can be a bag such as a cloth bag made of cotton, woolen, leather, or other natural or synthetic material, or a pail.

Further objects, features, advantages and objects of the present invention will be apparent to those skilled in the art from consideration of the specification and practice of the invention disclosed herein. It is intended that the specification and examples herein be considered as exemplary only, with a true scope and spirit of the invention being indicated by the claims herein.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagrammatic representation of the face of the number tiles and mathematical symbol tiles together with a sample logo. The tiles are represented in different shades of color.

FIG. 2 is a sample Periodic Table.

FIG. 3A – 3T show sample alphabets from different countries.

DETAILED DESCRIPTION OF THE INVENTION

The inventor has discovered novel mathematical game, chemistry game, physics game and language game, each of which can be played by people of all ages and each having an educational component and a fun component. The present invention provides for a game set that contains a plurality of sets of tiles, cards or pictorial representation of tiles or

cards. For ease of reference, all such tiles, cards or pictorial representation of tiles or cards or other similar playing pieces will be referred to herein as tiles, with the understanding that the present game can be played in various forms, for example, tiles similar to the game of Mahjong or Rummikub or Scrabble and cards similar to conventional playing cards that have four suits: diamonds, clubs, hearts and spades. Each tile of the invention contains a number, a letter of an alphabet, a mathematical symbol or function, a chemical symbol representing an element, such as an element of the Periodic Table, a word, a wild number (which can be played as any number), a wild symbol (which can be played as any symbol), a wild alphabet (which can be played as any alphabet), or the word "log." Optionally, the wild number or symbol or alphabet can be a blank tile.

In one embodiment of the present invention, the tiles are not decorated. In another embodiment, the tiles are decorated. The decoration includes any decoration, including those that appeal to young children, teenagers, or adults. For example, the decoration includes dots, one or more vegetables, one or more fruits, airplanes, cars, trucks, trains, robots, balloons, hearts, diamonds, spades, clubs, or other decorations commemorating an event. Such commemoration includes, for example, St. Patrick's day, such as represented by a 3-leaf clover; Valentine's day, such as represented by roses, angels, or hearts; Independence Day, such as represented by flags; Halloween, such as represented by pumpkins, witches, owls or bats; Thanksgiving, such as represented by turkeys or food; Christmas, such as represented by Christmas trees, stars, Santa Claus, stockings, or presents; and Hanukah, such as represented by menorahs.

In another embodiment of the present invention, the tiles are decorated in a way such that handicapped people can "read" the tiles.

The number on the tile can be any number. In one embodiment of the invention, the number is any number chosen from among: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. In another embodiment, the number is chosen from among any number between 0 and 100. In another embodiment, the number is chosen from among any number between 0 and 1000. In a further embodiment, the number is chosen from among any number between 0 and 10,000 or greater. In one embodiment, the number on the tile is in superscript, such as ("^{2}") or ("^{3}"), for example. In another embodiment, the number is in subscript. In a further embodiment, the number is neither in superscript nor subscript, that is, it is a regular number. The numbers herein include fractions and decimals.

In one embodiment of the invention, the number is spelled out, such as "One," "Two," "Three," and so forth. In another embodiment, the numbers on each tile can include numbers in any language, such Chinese, for example.

The present invention includes tiles each of which contains a letter of an alphabet, such as from the alphabet "a" to the alphabet "z." The alphabet can also be in any language, English or non-English. Non-English alphabet includes, for example, an Albanian alphabet, an Arabic alphabet, a Bengali alphabet, a Catalan alphabet, a Croatian alphabet, a Czech alphabet, a Danish alphabet, a Dutch alphabet, an Estonian alphabet, a Farsi alphabet, a Finnish alphabet, a French alphabet, a German alphabet, a Greek alphabet, a Hebrew alphabet, a Hindi alphabet, a Hungarian alphabet, an Icelandic alphabet, an Italian alphabet, a Japanese alphabet, a Latvian alphabet, a Lithuanian alphabet, a Norwegian alphabet, a Polish alphabet, a Portuguese alphabet, a Punjabi alphabet, a Russian alphabet, a Serbian alphabet, a Slovak alphabet, a Spanish alphabet, a Swedish alphabet, a Thai alphabet, a Turkish alphabet, a Ukrainian alphabet, a Vietnamese alphabet and a Welsh alphabet.

The present invention includes tiles each of which contains one or more symbols commonly used in mathematical equations, including, for example, a plus symbol ("+"), a minus symbol ("−"), a multiplication symbol represented by ("x") or an asterisk ("*"), a division symbol ("÷"), a square root symbol such as ("√"), a cube root symbol ("³√"), a "log" notation, an open parenthesis ("("), a close parenthesis (")"), a first open bracket ("["), a first close bracket ("]"), a second open bracket ("{"), a second close bracket ("}"), a greater than symbol (">"), a smaller than symbol ("<"), an equal sign ("="), a percentage symbol ("%"), a dollar sign ("$"), a pound sign ("£"), a Euro sign ("€"), a Yen sign ("¥"), a cent sign ("¢"), an integration ("∫") sign, a degree ("°") sign, a plus and minus ("±") sign, a slash ("/"), a pi ("π") sign, a delta ("δ") sign, and the like.

The number, letter or symbol can be placed on the tile by any conventional means, such as by printing, pressing, inscribing, or carving such on the tile or by pouring of a mould. The number, symbol or letter can be flat, raised, depressed, painted or in color or not.

The tile can be made of any suitable stiff material, such as wood including pressed wood, laminated wood, paper including recycled paper, or cardboard, or metal, or alloy, or glass, or ceramic, or clay, or synthetic materials, such as plastic, or shells, or animal bone and the like. The material can be painted or stained or not.

The tile can be of any size. In one embodiment of the invention, the tile is made smaller for young children and larger for adults. It is of a size that is easy to handle or hold. For example, the size of the tile can be the same as the Mahjong tiles or the Rummikub

tiles, a description of which can be easily found via the Internet, such as through a Google search. The tiles can be in the form of playing cards as well, and can be the same, smaller or larger than the conventional playing cards. In one embodiment of the invention, the tiles in the game set are all of the same size or same color. In another embodiment, the tiles are of different sizes or color. For example, the number or alphabet tiles can be in one color or of the same size, while the mathematical symbol tiles are of another color or size.

The tile of the present invention can be of any shape. In one embodiment, the tile is of a square shape or a rectangular shape. In another embodiment, the tile is of a triangular shape or a circular shape. In a further embodiment, one set of tiles can be of one shape and another set of tiles can be of a different shape. For example, the numbers can be square or rectangular in shape, while the mathematical functions are triangular or circular in shape or vice versa, or any variations thereof.

The tile of the present invention can be of any suitable thickness. In one embodiment, the tile is relatively thin, such as less than ½ inch. In another embodiment, the tile is relatively thick, such as greater than ½ inch, such that each tile can stand on its own without any further support.

In one embodiment of the present invention, the game set includes a plurality of stands. Each stand is made to contain a plurality of tiles. For example, as a player picks a tile, the player will be able to place the tile on the stand so that the player can see the face of the tile, without having to hold onto the tile and without showing the tile to the other players. In one embodiment, the stand can contain at least about 10 tiles or 20 tiles, or 30 tiles or more.

In one embodiment of the invention, the stand will have a front surface, a back surface and a base. The front surface is indented to hold two or three levels of tiles. In one embodiment, the stand contains slots into which the tiles can be inserted. In another embodiment, the stand is tilted so that the tiles rest against the stand. The base is constructed so as to allow the stand to stay upright without further support.

The stand can be made of any suitable material, and can be made of the same material as the tile or not. For example, the stand can be made of wood, paper, particularly cardboard paper, metal, alloy, glass, ceramic, clay, plastic or other synthetic material or bone or the like.

The game set of the present invention optionally includes a timing device, such as an hour-glass, for example, timed for 1 minute, 2 minutes, 3 minutes, 4 minutes, or 5 minutes, for example.

The game set of the present invention optionally includes a board such that the game is played as a board game. In such an instance, the game is provided with game pieces, one for each player to control to move around the board, as well as one or more dice, where each player can throw the dice in turn and move his or her game piece on the board based on the number on the face of the dice, for example.

In another embodiment, there is provided a set of instructions or rules for playing the game. The instructions will provide for how the game is to be played. It is to be understood that the game of the present invention can be played in a variety of ways, depending on the age and creativity of the players. Hence, the players may play the game as an addition game, where only the addition ("+") symbol is used, or a subtraction game, where only the subtraction ("-") symbol is used, or a multiplication game, where only the multiplication ("x") symbol is used, or a division game, where only a division ("÷") symbol is used, or any combination of such, or according to the players' own rules. The instructions and rules will be considered as suggestions.

In one embodiment of the invention, the instructions include a purpose for the game. The purpose can be, for example, for each player to lay down full equations, where the player who creates the highest number of equation wins the game. Such full equations can be, for example, $1 + 1 = 2$, or $10 - 1 = 9$, or $2 \times 2 = 4$, or $8 \div 4 = 2$, or $(2 \times 2)^2 = 16$.

In another embodiment of the invention, the instructions provide that the first player to dispose of all of his or her tiles wins the game.

In another embodiment of the invention, the instructions provide that scores are to be kept. There are different ways to keep scores, again depending on the players' creativity or desire. For example, the result obtained by each equation can be a player's score, and the player can add up all the scores for all the equations the player laid down during the game. In yet another embodiment, the scores can relate to the number of mathematical symbols used in an equation, for example, one point each for each plus, minus, multiplication or division symbol used.

In a further embodiment, there is provided a plurality of sets of tiles as above, where each tile contains an alphabet. In one embodiment, such alphabet tile can be used in an algebraic equation, such as $(a + b)^2 = a^2 + 2ab + b^2$. In this embodiment, the alphabet can be in any language.

The present invention optionally includes a container for holding the game set. The container can be made of any suitable materials. For example, the container can be simply a cardboard box. Optionally, the container can be a wooden box, a metal box, a glass

box, a ceramic box, a clay box, a plastic box, a box made of animal bones or shells, or a box made of other synthetic materials, or a combination of such, as desired.

In one embodiment of the invention, the tiles each contain a small magnet such that the tiles can be played on a metal surface for ease of use while traveling.

In another embodiment, the game set includes, but is not limited to: twelve (12) tiles of each of the numbers, such as: 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 and of each of the mathematical symbols. Optionally, the number of tiles for each number or symbol can vary between 4 and 20 or more, or between 6 and 18 or more, or between 8 and 16 or more, or between 10 and 14 or more.

In yet another embodiment, the game set contains a total of about 200 tiles, or about 210 tiles, or 212 tiles, or about 216 tiles, or about 220 tiles, or about 230 tiles, or 232 tiles.

In still another embodiment, the invention provides a language game set containing tiles each of which contains a word. In one embodiment, the words are all nouns. Optionally, the words are all pronouns, or verbs, or adjectives, or adverbs, or prepositions, or gerunds, or conjunctions, or others.

In another embodiment the language game set contains tiles that have a mix of nouns, pronouns, verbs, adjectives, adverbs, prepositions, gerunds, or conjunctions, or other parts of a sentence.

In a variation of the invention, at least two mathematical symbols are placed on each symbol tile. The two symbols can be, for example, a plus symbol and a minus symbol, or a multiplication symbol and a division symbol. Such alternative symbols can be present on the same face of the tile or can be present in opposite faces of the tile, each tile having a first front surface and a second back surface.

In yet another embodiment of the invention, the invention includes a method of playing a game as above, where the method includes providing a game set and allowing the game to be played. In another embodiment, the method includes providing instructions or rules for playing the game.

In one embodiment of the invention, the game is played by each player taking turns laying down one or more equations during the player's turn. In a further embodiment of the invention, a player may re-arrange the equations that have been laid out by the players. In yet another embodiment, the players may be required to use all the tiles from one or more equations that are being re-arranged. In yet another embodiment, a player who does not have any tile to play during his or her turn may pick a tile from a pool.

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In another embodiment of the invention, the game can be played at different levels of difficulty by removing or adding one or more mathematical functions. For example, a game can be played by using only addition functions, or only subtraction functions, or both while removing all the other functions. Optionally, multiplication functions can be included but not division functions. Still optionally, all mathematical functions can be included to increase the challenge.

In a further embodiment of the invention, the game can be played by the players have free access to the mathematical symbol as needed. Optionally, the players may access the mathematical symbols through picking from a mathematical symbol pool. Alternatively, each player may start with a set of mathematical symbols, with the requirement to pick from a pool when the initial set is exhausted.

In another embodiment, there is provided a software program, where the program is configured to provide the game set as above, and to allow the game to be played. The software can be provided on a computer disk or CD, or DVD, or an electronic medium such as a hand held device, for example, a Palm Pilot, a cell phone and the like. The game can be made accessible on the Internet.

The present invention includes a method of making a game set as above, the method includes carving the tiles out of wood or engineered wood or simulated wood, or providing a mould and pouring a tile-making material into the mould. The tile-making materials can be any suitable material conventional in making toys including for example, plastic, glass, metal, alloy, or other synthetic materials. Optionally, the tiles can be made in the form of playing cards, such as using cardboard paper, and the number, letter or symbol is then printed thereon.

The present invention includes a board for providing a playing surface. The board can be any conventional board made of any conventional materials for playing board games including, for example, a cardboard board. Optionally, the container for the game set can be partially unfolded to provide a playing surface such as those used for chess games.

The board game of the invention can be made with a variety of themes, provided that it requires the players to build equations or sentences.

EXAMPLE 1. CAPTURING AN EQUATION.

The players can agree on rules of the game at the start since the rules can vary depending on the level of complexity the players desired. For example, one rule may be that: a number x 0 = 0 is not an acceptable equation for the game. Another rule may be that no

number laid down can be higher than 3 digits. Another rule may be that each player has 30 seconds or 1 minute per turn. If a player cannot lay down an equation or make a move, such as successfully capture an equation within the time set, he or she has to pick a tile and lose a turn. An equation is considered successfully captured if all the "number" tiles in the equation are used, together with at least one "number" tile from the player's hand.

In this game, two, or three or four or more players can play. Each player will pick five "number" tiles, face down, the "number" tiles being the tiles with numbers on the face of the tiles. Each player will additionally turn one "number" tile over. The player who turned over the highest number on the "number" tile is Player No. 1. Player No. 1 starts the game. The game can then proceed clockwise, with the player to the left of Player No. 1 being Player No. 2, and so on.

Player No. 1 will examine his/her 5 tiles and, if possible, lay down an equation using all or some of the tiles in his/her hands and one or more of the "function" tiles, the "function" tiles being an operator such as a plus ("+") tile, a minus ("-") tile, a multiplication ("x") tile or a division ("÷") tile or is an equal sign ("=") or parenthesis or others relevant to a mathematical equation. The "function" tiles can be freely available or players can agree that a player must pick a function tile during his/her turn.

Assuming in the present game that the "function" tile is freely available, Player No. 1 can use as many "function" tile as needed to lay down his/her equation. The rules can also provide that a minimum threshold number must be reached before a player can lay down his/her tiles, for example, the result of the operation must be 25 points or above. Thus 5 x 5 = 25 will meet this requirement, but 5 + 5 = 10 will not meet this requirement. A player can use all the tiles in his/her hands to create one or more equations. After Player No. 1 has laid down his/her equation(s), he/she can replenish his/her hand with the tiles not yet picked.

The other players then take their turns to do the same as Player No. 1.

When it is Player No. 1's turn again, Player No. 1 can capture another player's equation or lay down another equation. The agreed to rules can provide whether a player can only capture one equation at a time. The agreed to rules can also provide whether a capture equation must be kept as one equation or may be broken down into multiple equations. Consideration must be given to the degree of sophistication of the players, bearing in mind that if an equation cannot be broken down, it will become more and more complex as the game proceeds.

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The game is played until all the "number" tiles are used up. The player who has the highest number of equations wins the game.

EXAMPLE 2. ONE-ON-ONE COMPETITION.

This game can be played between two or more players. Again, each player picks five "number" tiles and takes turn forming equations. Instead of replenishing the tiles after laying down each equation, a player can only pick one tile at a time. For example, if two players are playing, each can pick a "number" tile and form equations as fast as he/she can, with the "function" tiles being freely available. The person with the highest number of equation wins when all the tiles have been picked and used in equations.

EXAMPLE 3. SCRABBLE FORMAT.

In this game, the equations can be played in a Scrabble format, where one equation can be built from part of another player's equation. The number on the tiles played or laid down will be the number of points a player earns, which includes the number previously laid down by another player which forms part of the equation being built. The player with the highest score wins when all the tiles have been played or used. Again, in this game, the "function" tiles are freely available.

EXAMPLE 4. A MORE COMPLEX GAME.

This game can be played by two to four players. In this game, each player picks 20 "number" tiles and two each of the "function" tiles. Each player takes turn laying down one equation per turn, or adding onto one equation per turn, regardless of whether the equation is an equation that the player laid down, or whether another player laid down the equation, using the tiles in the player's hands. If the player cannot create an equation or add to another's equation, he or she must pick a tile. In this game, the first person to use up all his/her "number" tile wins the game. Rules can be set such that, for example, only one or two digit numbers can be used.

EXAMPLE 5. A LANGUAGE GAME

In this game, the tiles are in the form of words. Each player can pick five tiles, face down. Each player will take turns forming sentences with the tiles in his/her hands. If a player cannot form a grammatically correct sentence with the tiles in his/her hands during

his/her turn, he/she must pick a tile. The game ends when all the tiles are used. The player with the highest number of sentences wins the game.

EXAMPLE 6. A CHEMISTRY GAME.

In this game, the tiles are in the form chemical elements, numbers and "function." Players take turns forming chemical equations, starting with five tiles per player and the "function" tiles are freely available. If a player is unable to form an equation with the tiles in his/her hands during his/her turn, he/she must pick a tile. The person with the highest number of equations wins the game. Chemistry equations include not only balancing chemical compositions but such things as combined gas law, for example, $P_1V_1/T_1 = P_2V_2/T_2$ and the like.

EXAMPLE 7. A PHYSICS GAME.

In this game, the tiles are in the form of letters, numbers and functions. This game can be played in the same way as the chemistry game. Physics equations include, for example, Ohm's Law, which is $V = IR$, Power $P = VI$, etc.

EXAMPLE 8. A BOARD GAME

In this game, a game board with one or two dices and moving pieces are provided. The game board will be in the same format as a Monopoly game board. Each player picks five tiles to keep in his/her hands. Players take turns throwing the one or two dices and moving the number of spaces on the game board as shown on the face of one or two dices. The game set will also be provided with a set of cards, which will have a theme. For example, the game may be to feed the children, and the cards will have different number of children. The cards will be of a size that fits within each space along the game board and will be turned face down, covering all the spaces along the sides of the game board. When a player throws a dice and lands on a space, he/she will turn over the card to see how many children he/she is to feed. The player can generate equations that will equal this number before player can throw the dice and move on during the player's next turn. If the player cannot generate a number that equals the number on the card, he/she will have to pick a tile during his turn and wait another turn. If a player can generate such a number, he/she will keep the card and move on. A new card will be put on that space. The game ends when all the tiles and/or cards are used up. The player who have fed the highest number of children, as reflected in the cards he/she has kept, wins the game.

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While the present invention has been described with reference to the specific embodiments thereof, it should be understood by those skilled in the art that various changes may be made and equivalents may be substituted without departing from the true spirit and scope of the invention. In addition, many modifications can be made to adapt a particular situation, material, composition of matter, method or process steps to the objective, spirit and scope of the present invention. All such modifications are intended to be within the scope of the claims appended hereto.